"Pussyfoot" Johnson Game In Fighting Demon Rum

His Sportsmanship When Hazed by London Medical Students in Line With His Daring Battles With Bootleggers in the Indian Country Years Ago

"Pussyfoot" Johnson. No one proceeded accordingly. for telling gags, or the humorists and cartoonists of the newsand magazines of the British Isles with such invaluable material for

He is being attacked violently and lauded violently by the British press, Johnson's mission over seas as a representative of the Anti-Saloon of America, is to help the British Isles follow the United States on the road of national aridity. He has a modest office in Fleet street and from it he directs the spectacular raids the dry forces are making upon the old conservative British point of view on the subject of the "pub."

halls. His hecklers are plenty, but they never "get his goats". The wets hate him and the drys marvel at him. He is always game. Altogether he has become considerably better known in than at home, and yet no acter ever came out of the West when it was wild and woolly. It is no nder that he has made the English sit up and take notice, even it they have so for refused to take this prophet of universal prohibition seri-

Though not taken seriously, Johnson is considered a "good sport" by the This was proved the other day when he was ridden through the streets of London on a stretcher by of the mob. He took the whole prosay he would like to get hold of the man who "threw the rock," as the wound was so serious that he might lose the sight of the eye, if not the

ragging gave Johnson an amount of publicity that years of usual prohibition campaigning never could have produced. Although no representations were made to our State Department because of the hazing, it caused both King George and Queen Mary to call upon the London police for an investigation. It gave Johnson

William Eugene Johnson first gained finds the Indian country during the ad- stroy all boose except a little for evionce "Pussyfoot" happened on a pese sministration of President Received, dence and arrest all concerned in the culiar situation. He found a narrow Department, Johnson was told to go

When he took hold of his job he orcement machinery.

been told by the department to "suppress," so he did iterally, and left two saloons. As soon as they had atthemselves injured to take up the cudgel with the Government afterwards. they would. They followed.

Times without number Johnson was and ever since he arrived in London lodged in fall at the order of local of- cil and a number of citizens. Johnson from America accounts of his doings ficials, only to be released later when and his men parleyed until the second have been coming home over the cable, they discovered that they were deal- salcon had gone the way of the first would sometimes pay a small fine, just eight days and then released. to gain time to go on to the next local-

Frequently his life was in danger. needed the money went-out and killed a man they thought was "Pussyfoot." They were paid half the reward and they and their employers proceeded to hold a glorious drunken wake around the body. Next day "Pussyfoot" and his deputies showed up and pinched the

Assaulted in Court Room

Once Johnson was sitting in a court coom, leaning forward with hand behind ear, for a bully came behind him with two Derringer pistols, the butts of which he applied to the baid pate of "Pussyfoot" with more force than tenderness. Johnson speedily took the count. He still bears the marks of that assault. Threat after threat was made to get riotous medical students and was hit him, and plot after plot was hatched, in the eye with a stone threwn by one but always something happened and Johnson was saved. Later, in most ceeding in good part, though he did cases, he succeeded in arresting the plotters.

Whenever Johnson found he could accomplish things by existing law or known rules of legal procedure he acted that way. When, however, he found no such law or rule he used common sense, force, persuasion, threat or scheming or a combination of all. He knew that it was against the law to sell liquor to Indians. He knew that liquor was being sold to them. He was told to "suppress" and he suppressed.

standing or protection as property. He acted on that knowledge and acted sreat notoriety, or reputation, accord- method was to take with him a deputy There never was a man associated ing as one views it, as law enforcement or two, enter a joint and smash it up with him who would not gladly have

LL England is talking about ary, found just what it meant and ually. Johnson would refuse to sub mit to arrest until the smashing had in a generation has supplied found a great lack both of law and he would march along with the marthe comedians of the halls and the precedent, and also a dearth of en- shal or sheriff as peaceable as a lamb. Once in the Indian country of Min

nesota Johnson and his men smashes the men and women who fancial tacked one of the places the village marsnal showed up. They refused to be arrested. One of the deputies went His attitude was to stop the sale of outside and talked with the marshal liquor and then let lawsuits follow if while "Pussyfoot" continued the work of demolition.

Then came the mayor, village couning with Uncle Sam's man and that and then they submitted to arrest. Uncle Sam was protecting him. If They were taken to the county jail at occasion memed to warrant Johnson Crookstown, where they were kept

While Johnson escaped death his ity where liquor sales were being deputies were not always so fortumade in violation of law. First and nate. Several of them were waylaid last he put more than 4,000 men be- and murdered. Others were killed during engagement with lawless elements bunch of law violators offered \$3,000 to death until they had cut some for his dead body. Some fellows who notches in their guns. Johnson himself never killed a man, but he has drawn blood in his own defense more than once.

The name "Pussyfoot" was given him by those whom he was hunting because of his pussyfooting characteristics. He would be here to-day and gone to-morrow and leave no trace of his departure. He would start West and come back from the East. He apparently would be dead, and suddenly he was alive. His work was almost uncanny.

Often he was able to get results by sheer bluff. He would march up to his man and, discarding his own weapon, invite the liquor dealer to do the same, promising him that if he could not handcuff him and take him away the accused man was free. That an admiration even from his enemie in the days when the West and Southwest were newer than they are now and when a fair fight was guaranteed all combatants. It is a fact that Johnson never was afraid of any human being and let folks know it, not, indeed, by braggadocio or vociferant declaration, but quietly and firmly, all the while looking his man in the eye. His great size and strength, of course, were in his favor, and even

it came to a fight he was as square as a die. Not infrequently men who suffered most from his enforcement activities Johnson knew another thing, and became his steadfast friends and fellow that was that liquor sold contrary to enforcers. On his staff he had, first law, as well as furniture and equip- and last, hundreds of men. Some of ment used in such illegal sale, had no them had been among the worst desperadoes of the country. He fought fire with fire, set thieves to catch promptly and vigorously. His favorite thieves and repaid honor with honor. with hatchets, a la Carrie Nation, de- given his life to protect his chief.

his enemies had to admit that when

Once "Pussyfoot" happened on a pestrip of land between Kansas and Ok-Once he and his men destroyed a lahoma which was literally no man's They were forthcoming. to Oklahoma and elsewhere and sup- joint containing \$12,000 worth of fix- land. An error in surveying had somepress the liquor traffic among the tures. Gambling paraphernalia went how left that little strip, say from a R. Johnson, not a coffin salesman, the same route. It frequently was dozen to fifteen feet wide and half a walked into the hotel. He was not up the word "suppress" in the diction- ways they were turned loose event- and built a long, narrow shack, being proprietor to jail.

Ruby Worth \$100,000, a Laborer's Lucky



careful that no part of it should be The three men held themselves without the pale of either State or Federal

law and they did an enormous busi-Made Friends of Victims.

hese men were without the pale of matter. respect to protection, so he took the smashed them up. He later found about their troubles with the Governwere put behind bars.

service Johnson had been a newspaper man and a writer for the magazines He put his knowledge of the writing requently stirred up things that way-Once or twice his vigorous and viruent pen landed him in durance vile. el which had been violating the law in a wholesale and flagrant manner

'Pussyfoot," whom he never had seen, was coming on a certain day to pull the place. During the day a small, walked up to the desk and registered "William E. Johnson," Before the ink

Beyond very general instructions of customary for local officials to come mile long, outside of either State. thrown out. Instead, he arrested the ment give other Injuns cow, no give the retort until the chamber is completely filled. When cars are used to the word "suppress" in the diction.

in either Kansas or Oklahoma, and Indians. He got to the chiefs and opened up a saloon, gambling house showed them how the white men were no license, of course, because Kansas ing the money for firewater and otherand Oklahoma, first of all, were dry wise making trouble. He treated the and there was no State authority to Indians on the level, and in due time Federal Government apparently had Many of his deputies either were Innot concerned itself about the strip, dians or half breeds and to-day there among the red men as he

ville, Ohio, every few days an Indian, on his way to Washington to see the great white father, stops in to consult Johnson took the ground that if "Pussyfoot" and get his help in some the law with respect to observance he does not get at least one letter they also were without the pale with from an Indian asking some sort of assistance. They write to him about law in his own hand and went in and their difficulties with the Indian agent; some sort of law whereunder they ment; about their family affairs; their Before his entrance into Government Many little Indian boys have been named for him.

When he is at his home in Wester-

an old Indian out, in California who game into his detective work and had had trouble with the irrigation officials and could not get though he had paid for it. The letter

was frank. It began: "Dear Pussyfoot: I think white man heap dem thief. Steal Injun's land. Steal Injun's water. Steal Injun's

noney Then followed a recital of the old nan's troubles and an appeal to John- cal iron or steel retorts or ovens and son to help him out. Johnson wrote to subjected to heat. The retorts are genthe Indian commissioner and the erally set in brick work, and each

street. He demanded explanations. For some reason or other, or through each retort to a condenser into which mistake, one Indian didn't get the the vapor containing wood alcohol and cow. So he wrote to "Pussyfoot." "Dear 'Pussyfoot,' "he wrote, "I want cord wood from which the wood

The Injun got his cow.

HE newspapers of the United proximately eight to ten cords, the ture of various dyes used in the manual States have printed volumes entire charge is loaded on the cars facture of leather. Varnishes in which

Prohibition Has Led Many to Drink Concoctions of It

With Fatal Effect, but Menace Is Not Limited That

Way, Existing in Other Forms as Well

Much in the Public Eye

Wood Alcohol's Danger

and run in on rails. concerning the disastrous con-Coal is used for fuel to heat the retorts. When sufficient heat is applied cestructive distillation of the wood hol or any liquid containing it, yet the average person still does not seem to takes place. The gaseous products pass over, most of them condensing in that wood alcohol is the most their progress. What is known as the permanent gas, however, passes along dangerous and most prevalent industrial poison of the alcohols used in the and is utilized for fuel beneath botlers or furnaces. If the retort doors are various trades, and instances of death broken or do not fit properly gases and and serious illness brought on by its vapors escape, which are not alone a cource of danger to the plant or an use are multiplying every year. Wood alcohol produces toxic effects whether irritation to the eyes of the workmen but constitutes a loss of product. taken internally, inhaled through the Escaped smoke and gases from retorts lungs or when coming directly in conare usually conducted to the furnace tact with the skin. Impairment of rooms, which are usually large frame vision, complete loss of eyesight and structures with monitor roof construceven death often result from drinking tion. Fires are of common occurrence as well as from inhaling the poison. n these furnaces, due to sparks and People working in places where cinders lodging in the under side of large quantities of wood alcohol were the roof, where dust is deposited from used constantly have died from inthe retorts and coal pits. This danger, haling the fumes. So dangerous is

this poison that in some cases death by the use of corrugated iron roofs. In some factories explosions have only a day or two to the fumes of occurred because of back pressure of of the dangerous properties of wood alcohol. Direct action of the burning gas from furnace to retort. liquid and of the proper methods polson upon the skin when used ex-As a result retort doors have been preventing ill effects among the ternally, although not quite as disblown off and workmen standing astrous, has its serious consequences near by have been killed. Various were hat manufacturing dyeing It produces inflammation of the skin methods are used to prevent back pres- artificial flowers, making pictu and in extreme cases death of the affected organ. Newspaper readers effective being an outlet pipe with ufacturing pencils and making vaare familiar with those instances where valves from the main duct at a point nish. In the hat manufacturing death and blindness have resulted when wood alcohol has been sold as from retorts. A second method is by of twenty workers were noted, all d providing valves in each branch lead- to wood alcohol, and consisting whiskey after being colored with burnt sugar or some other substance. There have also been many instances of peradditional precaution is that of con- anismia, near sightedness, and contan sons who have drunk wood alcohol knowing it to be such merely because The force of the steam aids in the out- membrane which lines the lids a they wanted the undoubted kick that ward movement of the gas, and the covers the eyeball. Similar condition any alcohol will give. But unfortuadded forward pressure prevents a although not quite so severe exist nately the kick obtained from wood

In the course of manufacture the partment of Labor immediately p condensed liquid is neutralized with mulgated and enforced rules which lime, thereby becoming converted into lessened the dangers. Technically wood alcohol is called acetate of lime, which is then dried in nethyl alcohol, although it is also kilns. They are usually located on the vestigation into the wood alcohol top of the retorts, so that the radiant dustry the department gave the fo carbinol, methanol, methyl hydrate heat of the retorts can be utilized for lowing conclusions: and wood naphtha, and under whatever the drying process. The lime must be name it appears it is advisable for any spread out by hand shovelling, and irritant to the skin and mucous mer employees doing this work are exposed brane, especially the palpebral as United States wood alcohol is manutr a temperature ranging from 90 to ocular conjunctiva. Inflammation factured almost exclusively from the 100 degrees, during the summer, while the hands and arms occurs frequent destructive distillation of wood, and at the temperature of the floor upon among workers exposed to the fun which they stand is even higher. An- or handling wood alcohol; conjursight establishments in New York other method of drying, which is tis at times with a swelling of the life State engaged in its production. The preferable from the standpoint of com- occurs among workers when expos ndustry employs 400 persons in this fort to the workers, consists in locat- to the fumes; nearsighted State, all of whom are males. The facing the kiln in a room above the fur- and blurred vision, are freque tories are located principally in Delafurnaces is communicated to the floor is really a temporary blindness lastic of the adjoining kiln room, thence dis- from twenty to forty hours, frequen fand is cheap and the cost of hauling

> he arts and crafts. It serves as a the inhalation of the fumes. The wo solvent for gums, dyes and resins, and alcohol acts both locally as an irrita-

wood alcohel is used possess the ad vantage of drying quicker than the Wood alcohol is more volatile havin a lower boiling point it dries faster. In also used in many industries when are hat manufacturing, dyeing an stiffening of artificial flowers, makin

picture frames, applying varnish the interior of beer vats, shellact knots in boards, varnishing furnitur pianos, pencils, toys and wooden pa terns. It is also used in stiffening hats, making varnish and lacque Even typists occasionally use it clean the type of their machines with cut knowledge of its dangerous p

State Investigation. The New York State Department

Labor recently made an investigation nowever, is being rapidly eliminated of conditions in six industries in who sons who handled it. These industri sure of burning gas, one of the most frames, varnishing brewery vata ma teyond all branch pipe connections tablishments visited physical defeng from each retort to a main. An dermatitis, or skin inflammatio necting a steam jet to the main pipe. tivitis, or inflammation of the delica in the other industries, and the I

The heat collected from the headaches and acute amblyopia whi Wood alcohol is used extensively in at times death ensue as the result

brave's troubles were at an end.

Every Indian who settles down to tightly fitting door. A stack leads farming is given a cow by the Gov-Perfected by Americans

the data desired to establish the fact descend with the utmost deliberation if left free to rise. By using electric to a place where it may settle to early motors and electric power measuring without inviting a catastrophe. Fir apparatus, the experimenters were able to carry on their researches from the ground and then rise without thus to obtain very accurate records for a landing.

chine in its entirety weighed about tain of his position. The nerist nav 2,300 pounds; and had it not been held gator, helped in this fashion, would down by intentionally added weight it far less likely to lose his way nigwould have risen straight up. At that or day; and, as has already been er time the combined effort of the motors plained, he can scrutinize the count was but a trifle more than 126 horse- beneath him in this leisurely mann

The layman may not grasp the From a military point of view th meaning of that performance. Let us hovering power would prove of make it clear. A well known builder estimable value, and would add est of aviation acrews has tabulated de- mously to the precision of attack Mr. McCarthy and Mr. Milhok took turns remaining with Mr. Gillmann

According to his figures, the best hellcopter is sure to make possible of thrust or lift per horsepower; and it is safe to say that the most effective airplane propeller in service today yields about ten pounds of lift per upon the element of lift and much No. 1 developed an efficiency of more ment of the helicopter the man in the

to grasp the fact that the helicopter which Dr. Hewlitt and Prof. Crocker ders. The machine will then train ing a comparatively small object in troduced with corresponding results. have brought to such a state—further whose translucent depths there was The byon is extracted by the open operation of it was halted by the signhave brought to such a state-further way for profound changes in the every the helicopter to navigate in day use of the heavier than air flying machine. To begin with, the greater lifting capacity per unit of power means that larger leads can be carried economically; that a machine for the will of the pilot! Apparently the a given service will do its work satispulsive plant; that higher speeds can greater than that of any creature be secured without adding to the motive equipment; and, finally, that a lt is solf-evident that the nelicept fixed quantity of fuel will take the promises to make its use possible is helicopter much further than an airplane of similar carrying capacity These facts have a direct bearing upon

tical claims to recognition. Because brought into competition, and it would

that the machine could and would fly it can grope its way amid fog. show

power!

fied that his products represent the communication between ship and share the acme of the art.

that his screws will do is to give some- what is hazardous and even dented thing a little better than seven pounds the case of an airplane.

One does not have to be an engineer

or returning to terra firma. -Again, because the helicopter or

produced at each stage. 2,550 Pound Lifting Power.

than twenty pounds of lift per horsepower! The gain in effective work is
amazing, to say the least.

See Jone 1978. Hewitt say.

the commercial applications of the flying machine. But the helicopter has other prac-

it is capable of rising directly from the ground without a or less remote outlying preliminary run or can return to such as are to-day defrom a moderate space—a flat roof, a ling and departing places stop of hopes street, or the deck of a vessel-and hotels, business houses includes, alight within a kindred area! It is In fact, Dr. Hewitt area to read between this manauvring power

Because emphasis has been in

tipping the craft with suitable red zontal plane, and it is authoritative, declared that the craft can stop, back move sidewise or aigrag agregably helicopter possesses potentially a free

can thus link immediately one to" with another quite as freely and rectly as is now the case by the arcepted mediums of land transports tion. The helicopter and the autom bile or motor truck may thus be

Poor Omaha Man Never Realized He Had a Fortune in His Pocket for Twenty Years MONTH ago John Mihok, 1943 South Twentieth street, Omaha, was a poor man, telling daily as ough to keep the wolf from the door

& furniture polisher and earning just of the old house that sheltered himself. his wife and five children. To-day he worth" at least \$75,000. Yet he has no more to-day than he had a month ago. But to-day he knows the value of what he has. For he had discovered that the "good luck stone" which he carried in his

pocket for years is really the largest flawless pigeon-blood ruby in the world, weighing 23.9 carats, Gustav Gillman, lapidary, of Chicago, who cut and polished the "great

Mihok," as it has been called, estjmated its value at \$100,000. The story of the ruby is one that thrills and one from which a minister might preach a great sermon. John Mihok was bern in the village of

and as he graw he decided to go to America to seek his fortune. But he had his fortune with him alreadyalthough he didn't know it. For his father had picked up a pretty stone one day by the side of a small stream and had brought it home It rested on the mantel in the little home where the family lived. It had wonderful deep, clear, carmine red

after the whole family had saved for keep it because his father had given the side of a stream. years to buy his passage, his father it to him. when he said good-by put into the

you make a lot of money and send it portunity, with his great opportunity in his pocket. John took the stone and said: It was a long, wearisome trip.



took it out one day and showed it to The Mihok family grew. It grew stone. He introduced Mr. Mihok to

At New York the Ellis Island cus-Foung man's hand the "pretty stone." toms officers smiled at the pretty "I decided I would see, "I took my luck stone and went to to Chicago. "Maybe it will bring you luck in the stone, little dreaming it was liable to "I took my luck stone and went to to Chicago. "We did to the jewelry store of Joseph P. Fren-" "We did to the jewelry store of Joseph P. Fren-" he said, "and maybe it will make it so all alone in the strange land of op- zer in South Fifteenth street."

"Maybe it will bring me good luck." were destined to elapse before John realized what it was. The jeweller He travelled by steerage on a ship learned the value of his "luck stone." advised him to take the stone to Chisailing from Trieste to New York. He worked around in various places, cago to have it cut. first in Scranton, Pa., where he mar-The great ruby was in John's big ried, then in Cleveland, and finally he

some of his fellow passengers. A faster than John's earnings did and Edmund H. McCarthy, a lawyer. Mr. colorings; it was indeed a pretty party of first cabin passengers were it was a tussie to make both ends Mihok told him what Father Rigge stone, and it lay on the mantel there making a "slumming trip" through meet. A few weeks ago Mr. Mihok and Mr. Frenzer had said about the the steerage. One who saw it offered was reading a story in a newspaper When John started for America, him \$5 for it, but John said he would telling about a man finding a ruby by

"Oh, if only my luck stone would be a ruby," he said to himself.

Mr. Frenzer nearly had heart fallure when he held the stone in his This was in 1903. Sixteen years hand, applied a few tests to it and

Unaccustomed to the ways of the world Mr. Mihok turned to the Rev. Rigge also recognized the value of the entist had made a mistake? What if it away for our old ago and for our the British crewn,

stone and offered him one-fourth of the proceeds if he would take charge of the great stone and have it cut and Mr. McCarthy accepted the offer and

JOHN MIHOK,

WHOSE LUCKY STONE PROVED TO BE

4 100,000 RUBY

provided the money for the fateful trip "We did not sleep a wink that night on the train, I can tell you," said Mr. McCarthy. "We both kept guard. I won't tell you where we had the ruby. but it was in a mighty safe place." "Arriving in Chicago we asked for

and in due time came to the establishment of Gustav Gillmann.

the name of a precious stone expert

a little as Mr. Mihok undid the package in which reposed the stone. Mr. Gillmann took the stone in his hand and immediately the cynical smile dis-

"The expression on Mr. Gillmann's

appeared. His eyes seemed to bulge and his mouth opened, "He gave an exclamation, then rushed with the stone to his workroom and put it through various tests, talking all the while in most excited fashion.

"And then he told us that we had a wonderful ruby. He could not tell how pure it was before cutting it, but he said it was probably one of the during the process of cutting and polishing and when that work had been

No, we did not. We were too much is conducted very much as it was cenafraid of what would happen to that turies and centuries ago. The digging horsepower. The screws of Helicopter has been said of the vertical moving of having such a stone of harden said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screws of Helicopter has been said of the vertical moving the screw of the screws of Helicopter has been said of the vertical moving the screw of the ruby. Think of having such a stone, and washing there is a matter of worth \$100,000, in your possession." And the two men, after paying the lapidary, actually took the polished world. gem back to Omaha with them, sitting

light, worth \$160,000. The two men arrived in Omaha The two men arrived in Omaha. This is then dug up, carried on trolleys safely with the "great Mihok," as it to the steam cleansing mill, washed. has been named, and they went directly to the United States National Bank safe deposit vaults, where

they rented a box and saw the ruby

safely locked therein. This was last Friday. Then Mr. Mihok went home and told the news to his wife. He had not telegraphed to her from Chicago and the news was completely a surprise to her.

"She wouldn't believe me at first when I told her we would not have to sens its hardness by one-fifth. work any more and that we could move in a nicer house where we will have electric lights," he said, "but now she believes me and we will have com-

"We will buy a new home. I know money we will put in Liberty bonds, I a slight tinge of blue with the red.

the 'luck stone' was nothing but a children's education. The oldest boy who left school last year, will go back again and maybe we make a doctor of face was not encouraging. He smiled him, All the children get now a good education. My dead father was the giver of all my good luck. We are thankful, indeed, and very happy."

dechol is usually permanent.

popularly known as wood

Called Methyl Alcohol.

ware and Sullivan countles, where the

raw material grows in abundance.

both raw and finished product is low

of wood it is placed in oval or cylindri-

other substances is conducted. The

charge retorts or ovens, holding ap-

To secure the destructive distillation

water abounds

Omaha jewelers say the next largest flawless pigeon blood ruby is one of 17% carats, owned by the King of Bishenpur, India. Rubles of inferior grades, and with

flaws, run to much larger sizes, but those of the pigeon blood variety are more valuable than diamonds. Steps are being taken to market the

rubles are derived from the mines of the Mogok Valley, in completed he told them in a voice filled Burma, where much modern mawith awe that the ruby weighed 23.9 chinery and the very latest tools are carats, that it is flawless, that it is employed to facilitate the examination 8.5 hard and has a specific gravity of of a large amount of byon, or ruby bearing clay. Near by, in the valleys "Did we celebrate?" said Mr. Mihok. of the Burmans, the search for rubles hand labor; but they are still getting

up all night in the car, scarcely dar-ing to talk in the fascination of hav-hand, a scientific system has been in-In the Mogok Valley, however, surface down to the ruby bearing clay. passed through sieves, and then closely scrutinized for rubies and spinels. In addition to the pure ruby, spinel

or balas rubles, are found in large quantities in Mogok. Whenever the ruby is found there also is spinel. Both are crystals of aluminum, but of varying shape. While the true ruby may be said to be pure corundum only, the spinel shows a minute quantity of magnesium, the presence of which les-There is in use at these mines an instrument called the dichroiscope,

whereby rubles are separated from the spinels with the utmost accuracy and certainty. The gem is placed in the instrument in such a way that a ray a nice one, just what we want, for of light passes through it and is pelar-\$4,000. And we are going to buy a ized. The true ruby shows a pure the earth in a similar fashion, name of safety for the little automobile. The rest of the red ray, whereas the spinel discloses this means that the craft can get away is pothing fanciful in the

ther, it can come within a few feet

the very lowest speeds upward, and touching it if the location is not stilled of energy consumed and lift or thrust | . If aloft, and for any reason the people in the helicopter desire to o serve carefully the underlying terral the machine can be held immobile Finally, with the propeller blades set any desired altitude. This would be at a certain angle and the screws mit the pilot to wait until a passent turning only seventy times a minute, cloud had swept clear of his objects the total lift of the two propellers or give him a chance to study the amounted to 2.550 pounds! The ma- landscape below and thus make of

even at close range, without peril.

this will be accomplished easily the same time hold its altitude. seems that it will need an in-limit of but a very few dearway to don of action when aloft which